

CLAIM AMENDMENTS

1.-36. (Canceled)

37. (Previously Presented) An apparatus for suturing a tissue membrane, the apparatus comprising:

a tubular body having a proximal portion and a distal portion, the distal portion extendable through an opening in the tissue membrane caused by a catheterization procedure;

a needle advanceable in a distal direction along the tubular body and through the tissue membrane adjacent the opening in the tissue membrane the needle having an eyelet and a length of suture through the eyelet;

a hemostasis seal member on the distal portion of the tubular member, the seal member being openable against outflow of fluid through the opening in the tissue membrane; and

a suture chamber defined in the proximal portion of the tubular body, the suture chamber holding a length of suture, wherein the needle is adapted to carry at least a portion of the length of suture from the suture chamber through the tissue membrane.

38. (Original) The apparatus of claim 37 further comprising a suture retrieval assembly at the distal portion of the tubular body and deployable to receive the suture after the tubular body is extended through the opening in the tissue membrane.

39. (Original) The apparatus of claim 37 wherein the suture is attached to the needle.

40. (Previously Presented) The apparatus of claim 37 wherein the eyelet carries a doubled-back length of suture.

41. (Original) The apparatus of claim 37 wherein the needle is a hollow needle that carries the suture through the center of the hollow needle.

42. (Canceled)

43. (Currently Amended) An apparatus for suturing a tissue membrane, the apparatus comprising:

a tubular body having a proximal portion and a distal portion, the distal portion sized to be extendable through an opening formed in the tissue membrane caused by a catheterization procedure; and

at least one hollow needle advanceable in a distal direction along the tubular body and through the tissue membrane adjacent the opening in the tissue membrane; and

at least at least one length of suture, wherein a portion of the suture is disposed within a lumen of the hollow needle. wherein the hollow needle is configured to carry the portion of the suture through the tissue membrane as the hollow needle is advanced distally.

44. (Currently Amended) The apparatus of claim 43 further comprising a suture chamber defined in the proximal portion of the tubular body, the suture chamber holding at least a portion of the length of suture, wherein the hollow needle carries at least a portion of the length of suture from the suture chamber through the tissue membrane.

45. (Original) The apparatus of claim 43 further comprising a suture retrieval assembly at the distal portion of the tubular body and deployable to receive the length of suture after the tubular body is extended through the opening in the tissue membrane.

46. (Original) The apparatus of claim 43 further comprising a hemostasis seal member on the distal portion of the tubular member, the seal member being openable against outflow of fluid through the opening in the tissue membrane.

47. (Currently Amended) An apparatus for suturing a tissue membrane, the apparatus comprising:

a tubular body having a proximal portion and a distal portion, the distal portion extendable through an opening in the tissue membrane caused by a catheterization procedure;  
at least one hollow needle configured to be advanceable in a distal direction along the tubular body and through the tissue membrane adjacent the opening in the tissue membrane wherein the needle is configured to carry at least a portion of a length of suture through the tissue membrane as the needle is advanced distally; and  
at least one length of suture, wherein a portion of the suture is disposed within a lumen of the hollow needle, wherein the hollow needle is configured to carry the portion of the suture through the tissue membrane as the hollow needle is advanced distally; and

a hemostasis seal member on the distal portion of the tubular member, the seal member being openable against outflow of fluid through the opening in the tissue membrane.

48. (Currently Amended) The apparatus of claim 47 further comprising a suture chamber defined in the proximal portion of the tubular body, the suture chamber holding ~~a~~ the length of suture, wherein the hollow needle carries at least a portion of the length of suture from the suture chamber through the tissue membrane.

49. (Previously Presented) The apparatus of claim 48 further comprising a suture retrieval assembly at the distal portion of the tubular body and deployable to receive the suture after the tubular body is extended through the opening in the tissue membrane.

50. (Canceled)

51. (Canceled)

52. (Canceled)

53. (New) The apparatus of claim 43 wherein the suture disposed through the lumen of the hollow needle is doubled back along an outer surface of the hollow needle.

54. (New) The apparatus of claim 53, wherein a distal end of the hollow needle includes a cutting edge.

55. (New) An apparatus for suturing tissue, comprising:  
a tubular body having a proximal portion and a distal portion, the distal portion extendable through an opening in the tissue;  
a needle advanceable in a distal direction along the tubular body and through the tissue adjacent the opening in the tissue membrane, the needle having an eyelet and a length of suture through the eyelet; and  
a hemostasis seal member associated with the distal portion of the tubular member, the seal being openable against outflow of fluid through the opening in the tissue membrane.

56. (New) The apparatus of claim 55 further comprising a needle magazine associated with the tubular body, the needle magazine configured to house a portion of the needle.

57. (New) The apparatus of claim 56 further comprising a suture chamber defined in the proximal portion of the tubular body, the suture chamber holding a length of suture, wherein the needle is adapted to carry at least a portion of the length of suture from the suture chamber through the tissue membrane.

58. (New) The apparatus of claim 57 further comprising a suture retrieval assembly at the distal portion of the tubular body and deployable to receive the suture after the tubular body is extended through the opening in the tissue.